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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/915,360	07/27/2001	Hiroshi Ishii	R2184.0123/P123	6987

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EXAMINER

MILIA, MARK R

ART UNIT	PAPER NUMBER
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2625

DATE MAILED: 07/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/915,360

Applicant(s)

ISHII ET AL.

Examiner

Mark R. Milia

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/2/06 and 5/2/06 has been entered. Currently, claims 1-9 are pending.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawasaki (US 5969828) in view of U.S. Patent Application Publication No. 2003/0128967 to Ito et al.

Regarding claim 1, Kawasaki discloses an image processing device comprising: a dividing part which divides image drawing instructions into a plurality of sets of compressed image drawing instructions without decompressing them in such a manner that each set of image drawing instructions can be processed without referring to any

other set of image drawing instructions (see Fig. 6, column 4 lines 32-36, column 12 lines 20-25 and 40-47, column 15 lines 8-14, and column 16 lines 26-32), a distributing part which distributes the plurality of sets of image drawing instructions to a plurality of image production processing parts (see Fig. 4, column 10 line 64-column 11 line 4, column 11 lines 9-19 and 30-35, column 11 line 59-column 12 line 14, and column 16 lines 5-11), and said plurality of image production processing parts each of which generates drawing data for image drawing processing from the plurality of sets of image drawing instructions (see column 11 lines 30-40, column 11 line 59-column 12 line 14, and column 16 lines 12-20).

Kawasaki does not disclose expressly a dividing part which divides compressed image drawing instructions into a plurality of sets of image drawing instructions.

Ito discloses a dividing part which divides compressed image drawing instructions into a plurality of sets of image drawing instructions (see Fig. 23 and paragraphs 98-99).

Regarding claim 5, Kawasaki discloses an image processing method comprising the steps of: dividing image drawing instructions into a plurality of sets of compressed image drawing instructions without decompressing them in such a manner that each set of image drawing instructions can be processed without referring to any other set of image drawing instructions (see Fig. 6, column 4 lines 32-36, column 12 lines 20-25 and 40-47, column 15 lines 8-14, and column 16 lines 26-32) and generating drawing data for image drawing processing from the plurality of sets of image drawing instructions

(see Fig. 4, column 10 line 64-column 11 line 4, column 11 lines 26-35, column 12 lines 5-11 and 59-63, column 13 lines 1-8 and 53-56, and column 16 lines 5-11).

Kawasaki does not disclose expressly dividing compressed image drawing instructions into a plurality of sets of image drawing instructions.

Ito discloses a dividing part which divides compressed image drawing instructions into a plurality of sets of image drawing instructions (see Fig. 23 and paragraphs 98-99).

Regarding claim 9, Kawasaki discloses an image forming apparatus comprising: a dividing part which divides image drawing instructions into a plurality of sets of compressed image drawing instructions without decompressing them in such a manner that each set of image drawing instructions can be processed without referring to any other set of image drawing instructions (see Fig. 6, column 4 lines 32-36, column 12 lines 20-25 and 40-47, column 15 lines 8-14, and column 16 lines 26-32), a distributing part which distributes the plurality of sets of image drawing instructions to a plurality of image production processing parts (see Fig. 4, column 10 line 64-column 11 line 4, column 11 lines 9-19 and 30-35, column 11 line 59-column 12 line 14, and column 16 lines 5-11), said plurality of image production processing parts each of which generates drawing data for image drawing processing from the plurality of sets of image drawing instructions (see column 11 lines 30-40, column 11 line 59-column 12 line 14, and column 16 lines 12-20), and a drawing processing part which performs drawing processing according to drawing data given by said parts, and thus forms an image (see Fig. 1, column 8 lines 57-59, column 11 lines 37-41, and column 16 lines 26-32).

Kawasaki does not disclose expressly a dividing part which divides compressed image drawing instructions into a plurality of sets of image drawing instructions.

Ito discloses a dividing part which divides compressed image drawing instructions into a plurality of sets of image drawing instructions (see Fig. 23 and paragraphs 98-99).

Kawasaki & Ito are combinable because they are from the same field of endeavor, dividing image data for subsequent execution.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the dividing of a compressed image into a plurality of segments to be executed, as described by Ito, with the system of Kawasaki.

The suggestion/motivation for doing so would have been to maintain image quality and to decrease the amount of required page memory.

Therefore, it would have been obvious to combine Ito with Kawasaki to obtain the invention as specified in claims 1, 5, and 9.

Regarding claims 2 and 6, Kawasaki and Ito disclose the system discussed in claims 1 and 5, and Kawasaki further discloses wherein image data corresponding to the given image drawing instructions to be processed here comprises image data obtained through data compression such that the resulting image data comprises a plurality of data blocks and each data block can be decompressed without referring to any other data block (see Figs. 4 and 6, column 12 lines 20-25, 40-47, and 52-56, column 13 lines 1-8, 12-27, and 51-56, and column 15 lines 8-14, 17-26, and 29-40).

Regarding claims 3 and 7, Kawasaki and Ito disclose the system discussed in claims 2 and 6, and Kawasaki further discloses wherein said dividing part divides given image data by a border between data blocks (see Figs. 6 and 7, column 15 lines 51-56, and column 20 line 6-column 21 line 24).

Regarding claims 4 and 8, Kawasaki and Ito disclose the system discussed in claims 1 and 5, and Kawasaki further discloses wherein image data corresponding to the given image drawing instructions comprises image data obtained through data compression by a fixed length compressing method (see column 12 lines 40-56, column 12 line 58-column 13 line 27, column 15 lines 40-56, column 19 lines 28-36, and column 20 line 10-column 21 line 49, reference shows that data is divided into blocks of a predetermined size based on the size of the received image and then compressed based on this information and the compression is not started until the proper number of lines have been read reached which is analogous to a fixed-length compression method).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. To further show the state of the art refer to the attached Notice of References Cited.

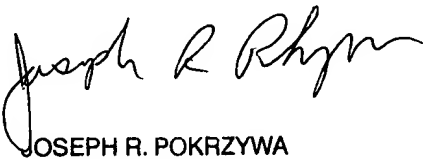
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark R. Milia whose telephone number is (571) 272-7408. The examiner can normally be reached M-F 8:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler M. Lamb can be reached at (571) 272-7406. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mark R. Milia
Examiner
Art Unit 2625

MRM



JOSEPH R. POKRZYWA
PRIMARY EXAMINER